

CHENTSOVA, O.S.; SAMOYLO, K.A., kand. tekhn. nauk dots., red.

[Textbook for the first part of the course "Theoretical principles of radio engineering": operator method; physical interpretation] Uchebnoe posobie po pervoi chasti kursa "Teoreticheskie osnovy radiotekhniki": Operatornyi metod; fizicheskaiia interpretatsiia. Moskva, 1965. 39 p.  
(MIRA 19:1)

CHENTSOVA, T. N.

Kosokina, Z. F., Levitskaya, S. B., Lur'e, S. L., Chentsova, T. N. and Shemiakin, M. M.,  
Synthesis of homosulfanylamide and some of its derivatives. p. 681

Two derivatives of homosulfanylamide have been synthesized:  $N^4$ (sulfanyl-)  
-homosulfanylamide and  $N^6$ -(homosulfanyl)-sulfanylamide.

Lab. of Organic Chem. of the All Union Sci. Res. Inst. of Biological Prophylactic of  
Infections. March 9, 1947

SO: Journal of Applied Chemistry (USSR) 21, No. 6 (1948)

CHENTSOVA, T.N.

KEDROV, B.; CHENTSOVA, T.[deceased] KUZHETSOV, I.V., redaktor; VOLODIMA,  
N.I., redaktor; SAKHIBAKOV, A.V., tekhnicheskiy redaktor

[Brauner, an associate of Mendeleev's; on the centenary of the  
birth of Bohuslav Brauner] Brauner-spodvishnik Mendeleeva; k  
stoletiu so dnia rozhdeniya Boguslava Braunera. Moskva, Izd-vo  
Akademii nauk SSSR, 1955. 124 p. (MLRA 8:11)

(Brauner, Bohuslav, 1855-1935)

(Mendeleev, Dmitrii Ivanovich, 1834-1907)

1. CHENTSOVA, Z. F.
2. USSR (600)
4. Bladder - Inflammation
7. Cystitis. Med. sestra no. 10, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

CHENUSHENKO, F., inzhener; SEMESHKO, N., inzhener

Repairing the rear spring bracket of the GAZ-51 truck. Avt.  
transp. 33 no. 5:30 My '55. (MLRA 8:8)  
(Motor trucks--Springs)

L 11384-63  
Pab-4 WH

EPF(n)-2/EWP(q)/EWT(m)/BDS/T-2/ES(w)-2 AFFTC/ASD/SSD Pu-4/  
S/120/63/000/002/028/041

73

AUTHOR: Stoykovich, Ye., Bachu, G., Bedenoyu, M., Chentya, N., and Khal'trikh, S. (R)

TITLE: Use of ceramics in betatron accelerating chambers

PERIODICAL: Pribory i tekhnika eksperimenta, March-April 1963, v. 8, no. 2,  
124-126

TEXT: The authors give instructions for making betatron accelerating chambers of ceramics which eliminate the deficiencies of glass and epoxy resins. A chamber made according to the authors' prescription has been successfully used for several years at the Atomic Physics Institute of the Academy of Sciences of Rumania; the only repair necessary was replacement of metallic coating near the injector. There is one figure.

ASSOCIATION: Institut atomnoy fiziki AN Rumynii (Atomic Physics Institute,  
Academy of Sciences Rumania)

SUBMITTED: February 12, 1962

Card 1/1 ja/ib

*CHE NYAK V.M.*  
KUZNETSOV,N.V., kandidat tekhnicheskikh nauk; SHCHERBAKOV,A.Z., kandidat  
tekhnicheskikh nauk; TITOWA,Ye.Ya., inzhener; CHE NYAK,V.M., inzhener

Optimum velocity of air and flue gases in air preheaters and a technical-economic comparison of heating surfaces. *Teploenergetika* 2 no.9:  
18-21 S'55. (MLRA 8:10)

1. Vsesoyuznyy teplotekhnicheskiy institut  
(Boilers--Air preheating)

CHENYAK, V.Ya.

Determination of molecular weight by using analytical ultracentrifuges.  
Biofizika 9 no.2:239-241 '64.  
(MIRA 17:12)

l. TSe. ~~kar'nyy~~ Irdena Lenina institut hematologii i perelivaniya  
krovi, Moscow.

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3

CHENYKAYEV, M.Yu., inzhener.

Remote control of a tower crane. Mekh.stroi. 13 no.12:24-25 D'56.  
(MIRA 10:1)  
(Cranes, derricks, etc) (Remote control)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3"

CHENYKAYEVA, Ye.A.; SPIRIDONOV, A.I.; SAVZDARG, V.E., redaktor; PAVLOVA,  
A.N., tekhnicheskiy redaktor

[Growing potatoes, vegetables, melons and squashes (demonstration plots); a guidebook] Kartofel', ovoshchnye i bakhchevye kul'tury  
(uchastok eksponatnykh posadok i posevov); putevoditel'. Moskva,  
Gos. izd-vo selkhoz. lit-ry, 1956. 23 p. (MLRA 9:11)

1. Moscow, Vsesoyuznaya sel'skokhozyaystvennaya vystavka, 1954-  
(Vegetable growing)  
(Moscow--Agricultural exhibitions)

CHENYKAYEVA, YE.A.

KOVUN, P.K.; NEVZOROV, A.P.; ANTONENKO, G.P.; BUDINA, L.V.; VORONINA, Ye.P.;  
GUSEV, P.I.; YELAGIN, M.N.; ZHURAVLEV, M.A.; ZALOZNYY, K.D.; KOMKOV, V.N.;  
KOROBOV, A.S.; KORCHAGIN, V.N.; LAVROV, V.N.; LAPSHINA, O.V.; LUTIKOV, I.Ye.;  
MAKEVIN, A.Ya.; MOROZOVA, F.I.; NEVZOROV, A.P.; PONOMARCHUK, M.K.; PUCH-  
KOV, A.M.; RAZMOLOGOVA, A.M.; RUBIN, S.M.; SELEZNEVA, O.V.; SEMENOVA, F.I.;  
SPIRIDONOVA, A.I.; SUSHCHEVSKIY, M.G.; USOV, M.P.; TARKOVSKIY, M.I.;  
CHENYKAYEVA, Ye.A.; SHENDRIKOV, G.I.; SHUL'GIN, G.T.; TSITSIN, N.V., aka-  
demik, redaktor; REVENKOVA, A.I., redaktor; KHOKHRINA, N.M., khudosestven-  
nyy redaktor; VMSKOVA, Ye.I., tekhnicheskiy redaktor; PEVZNER, B.I.,  
tekhnicheskiy redaktor.

[Plant breeding at the 1955 All-Union Agricultural Exhibition] Rastenie-  
vedstvo na Vsesoiuznoi sel'skokhoziaistvennoi vystavke 1955 goda. Moskva,  
Gos. izd-vo sel'khoz. lit-ry, 1956. 697 p. (MIRA 10:4)  
(Moscow--Plant breeding--Exhibitions)

USSR/Cultivated Plants. Potatoes. Vegetables. Melons.

M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20322.

Author : Z.A. Sytina, Ye. A. Chemykayeva.

Inst : The Siberian Scientific Research Institute for Grain  
Cultivation.

Title : A Prospective Early Variety. (Perspektivnyy ranniy sort).

Orig Pub: Kartofel', 1957, No 2, 55.

Abstract: The Sedov variety potato was raised by the Siberian  
Scientific Research Institute for Grain Cultivation through  
crossing the Early Punk 1830 variety X Katahdin variety  
and raising the hybrid seedlings on high agricultural  
ground during the summer planting. The early ripening  
variety, in Moscow Oblast' on the average through 1953-  
1956 almost doubly surpassed the productivity of the

Card : 1/2

CHENYKAYEVA, Ye.A.; SPIRIDONOVA, A.I.

[Vegetables and potatoes at the All-Union Agricultural Exhibition]  
Ovoshchnye kul'tury i kartofel' na ucheestkakh VSEKHV. Moskva, Gos.  
izd-vo selkhoz lit-ry, 1958. 78 p. (MIRA 12:4)  
(Vegetables) (Potatoes) (Moscow--Agricultural exhibitions)

ALEXANDROV, S.V., kand.sel'skokhoz.nauk; BOGUSHEVSKIY, A.A., kand.tekhn.  
nauk; VASHCHENKO, S.P., kand.sel'skokhoz.nauk; GERASIMOV, B.A.,  
kand.sel'skokhoz.nauk; GROMOV, N.G. [deceased]; KORBUT, V.A.;  
KUDREVICH, I.A.; MAMAYEV, M.G., kand.tekhn.nauk; NOVIKOV, A.P.;  
OSNITSKAYA, Ye.A.; SIMANOVSKIY, A.Yu.; SLEPTSOV, S.A.; SPIRIDONOVA,  
A.I.; TARAKANOV, G.I., kand.sel'skokhoz.nauk; CHENYKAYEVA, Ye.A.;  
KITAYEV, S.I., red.; FILATOV, N.A., zasluzhennyj agronom RSPFSR;  
CHUDIKINA, A.P., red.; MARTYNOV, P.V., red.; ARTSYBASHEVA, A.P.,  
tekhn.red.; BARBASH, F.L., tekhn.red.

[Vegetable growing under cover] Ovoshchavedstvo zashchishchennogo  
grunta. Moskva, Izd-vo N-va sel'.khoz.SSSR, 1960. 279 p.  
(MIRA 13:12)

(Vegetable gardening) (Greenhouses)  
(Hotbeds)

CHENYKAYEVA, Ye.A., metodist; SPIRIDONOVА, A.I., metodist; BYKOVA, A.F.

Farm work in August. Inform. biul. VINKH no. 8:33-34 Ag '63.  
(NIRA 17:8)

1. Ekspozitnyy uchastok ovoshchnykh kul'tur otdela sel'sko-khozyaystvennogo proizvodstva Vystavki dostizheniy narodnogo khozyaystva SSSR (for Chenykayeva, Spiridonova). 2. Glavnyy metodist pavil'ona "Pchelovodstvo" na Vystavke dostizheniy narodnogo khozyaystva SSSR (for Bykova).

CHENYKAYEVA, Ye.A., metodist; SPIRIDONova, A.I., metodist.

Work in vegetable gardening in November. Inform. biul. VDNKH  
no.11:25-26 N '63 (MIRA 18:1)

1. Ekspozitnyy uchastok ovoshchnykh kul'tur otdela sel'skogo  
proizvodstva na Vystavke dostizheniy narodnogo khozyaystva  
SSSR.

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3

GINETSINSKIY, A. G. and CHENYKAYEVA, G. Yu.

"The Electric Response to Indirect Stimulation of the Curarized Muscle,"  
Zhur. Fiz., Vol 28, No 1, p 29-33, 1940.

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3"

CHENYKAYEVA, Ye. Yu.

"Carbon ~~Anhyd~~drase in Crustaceans," Dokl. AN SSSR, 34, No.3, 1942

CHENYKAYEVA, Ye. Yu.

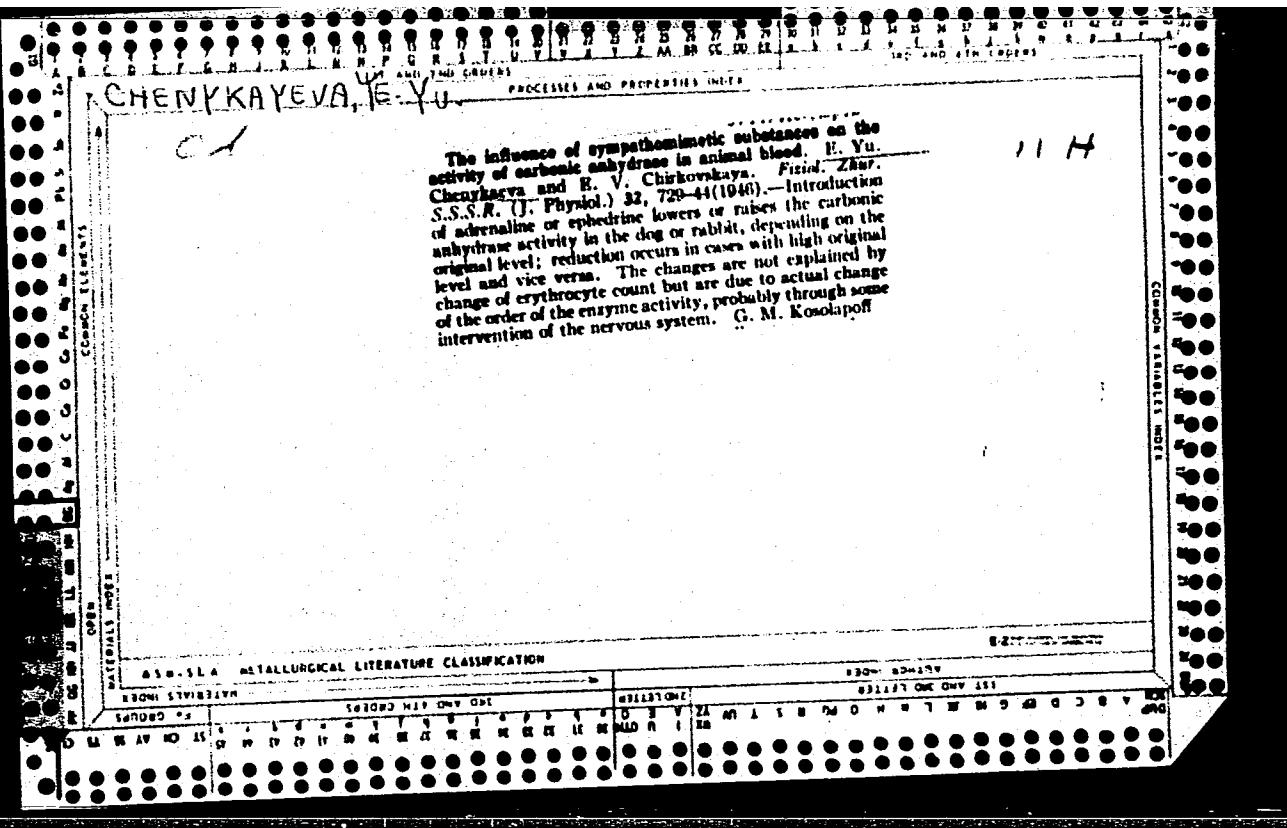
"On the Respiratory Function of the Blood of Insects," Dokl. AN SSSR,  
34, No. 4/5, 1942

Pavlov Phys. Inst., AS USSR

Karadog Biol. Station, Ukr. AS.

CHENYKAYEVA, Ye. Yu.

"Diagnostic Significance of Carbondic Anhydrase During Infection," Khirurgiya,  
15, No.5, 1945



CHENYKAEVA, Ye. Yu.  
CHENYKAeva, YE. YU.

PA 16T38

USSR/Medicine - Blood  
Medicine - Pressure

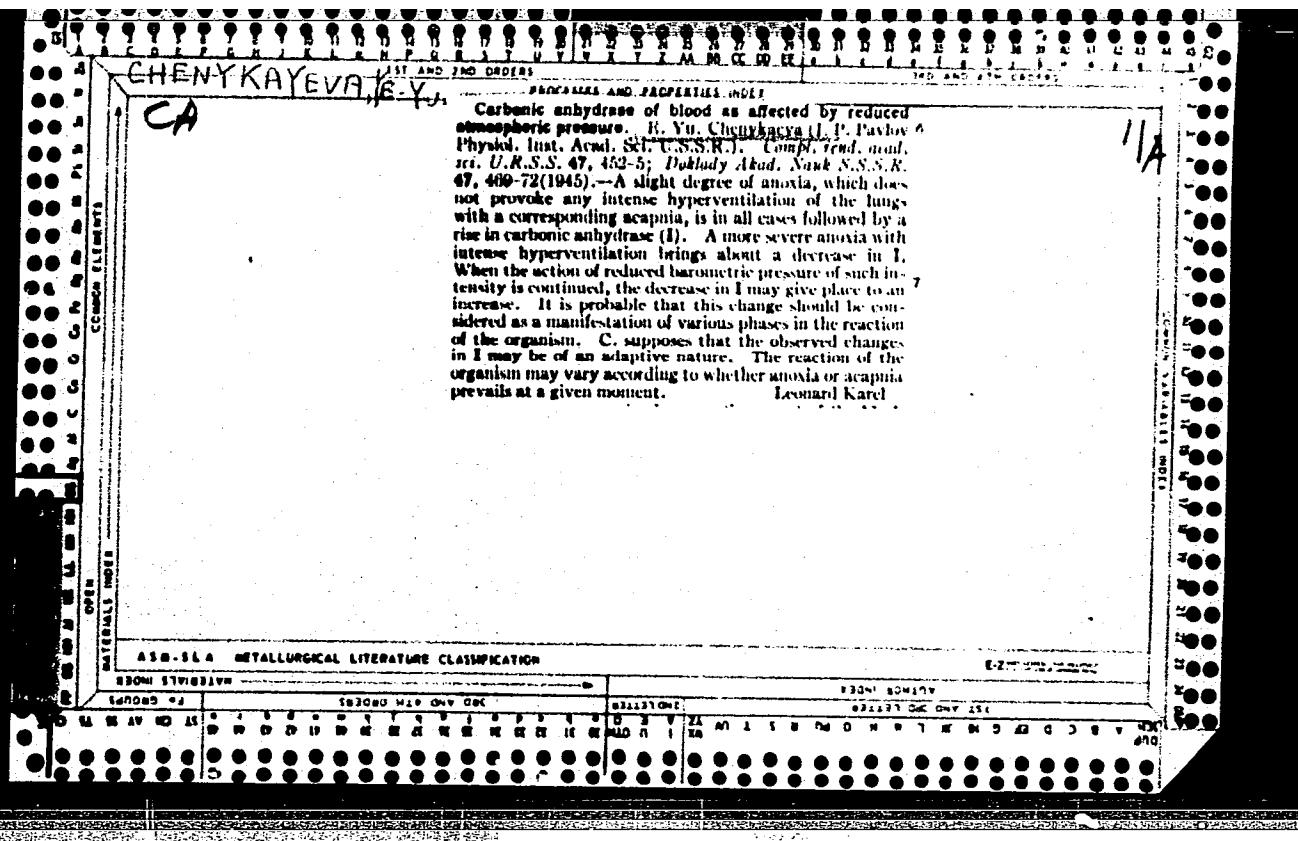
Feb 1947

"The Effect of Low Barometric Pressure on the  
Carbonic Anhydrase in Blood," by Ye. Yu. Chenykaeva  
Physiological Institute imeni Academician I. P.  
Pavlov, Academy of Sciences, 8 pp

"Izv Ak Nauk Ser Biol" No 2

Theory is advanced that the changes observed in  
the carbonic anhydrase are of an adaptatory  
nature, and that the reaction of the animal  
organism may vary depending on the factor (anoxia  
or acapnia) prevalent at a given moment.

16T38



CHEBKAYEVA, Ye.Yu.

Pole of the sympathetic nervous system in the regulation of carbo-anhydrase activity. Trudy fiziol. inst. 4:189-196 '49. (MLRA 9:5)  
(NERVOUS SYSTEM, SYMPATHETIC)  
(CARBOANHYDRASE)

CHENYKAYEVA, E. Yu.

(2)

The role of the nervous system in regulation of activity of carbonic anhydrase. E. Yu. Chenykaeva (I. P. Pavlov Physiol. Inst., Leningrad). Fiziol. Zhur. S.S.R. 40, 70-5 (1954). - Chamber expts. with cats which were subjected to atm. simulating high altitudes revealed that blood carbonic anhydrase activity is regulated under conditions of O<sub>2</sub> deficiency by the adrenal function of adrenal glands. At low stage of O<sub>2</sub> deficiency and in its early stages, the characteristic symptomatic changes of the enzyme activity are not observed if the adrenals are excluded from functioning (extirpation of one and denervation of the other); however, in deep O<sub>2</sub> deficiency the effects may appear even if adrenal function is thus eliminated. Apparently the enzyme is activated by adrenaline. G. M. Kosolapoff

CHENYKAEVA, Ye-Yu.

MD ✓ Effect of hypoxia on content of nucleoproteins in cells of cerebral cortex in rats as studied by the method of ultraviolet microscopy. B. M. Kreps and E. Yu. Chenykareva (I. P. Pavlov Physiol. Inst., Moscow). *Doklady Akad. Nauk S.S.R.* 104, 276-9 (1955).—Ultraviolet microscopy was employed for following the concn. of nucleoproteins in rat cerebral cortex under conditions of hypoxia induced either by brief evacuation to 100 mm. or prolonged maintenance at 240 mm. Prolonged moderate hypoxia lowers the absorption of ultraviolet caused by nucleoproteins more definitely than does the short term severe hypoxia. Particularly severe is the depletion in the V layer of the cortex. G. M. Kosolapoff

KREPS, Ye.M.,; VERZHBINSKAYA, N.A.,; CHENYKAYEVA, Ye.Yu.,; CHIRKOVSKAYA,  
Ye.V.,; GAVURINA, TS.K.

Adaptation of animals to chronic hypoxia; effect of adaptation  
to chronic hypoxia on the ceiling and on the rate of gas exchange  
with lowered oxygen content. Fiziol. zh. SSSR 42 no.1:69-77 Ja 56.  
(MLRA 9:5)

1. Laboratoriya sravnitel'noy biokhimii Instituta fiziologii  
imeni I.P. Pavlova AN SSSR, Leningrad.  
(ANOXIA, experimental,  
prep. of animals (Rus))

KREPS, Ye.M.,; VERZHBINSKAYA, N.A.,; CHENYKAYEVA, Ye.Yu.,; CHIRKOVSKAYA,  
Ye.V.,; GAVURINA,Ts.K.

Preparation of animals for chronic hypoxia; effect of chronic hypoxia  
on contents of hemoglobin, myoglobin, cytochrome and on activity of  
cytochrome oxidase and carbonic anhydrase in the blood and tissue.  
*Fiziol. zhur.* 42 no.2:149-158 F '56. (MLRA 9:6)

1. Laboratoriya srovnitel'noy biokhimii Instituta fiziologii imeni  
I.P. Pavlova AN SSSR, Leningrad.

(ANOXIA, effects,

on cytochrome, cytochrome oxidase, carbonic anhydrase,  
hemoglobin & myoglobin metab. (Rus))

(HEMOGLOBIN,

myoglobin & hemoglobin in exper. anoxia (Rus))

(CYTOCHROMES,

in exper. anoxia (Rus))

(OXIDASES,

cytochrome in exper. anoxia (Rus))

(HYDROGENS,

carbonic anhydrase in exper. anoxia (Rus))

Chenykaeva, Yu.

- Adaptation of animals to chronic hypoxia. E. M. Kreps, N. A. Verzhbinskaya, E. Yu. Chenykaeva, E. V. Chirkovskaya, and Ts. K. Gavurina (I. P. Pavlov Physiol. Inst., Leningrad). *Fiziol. Zhur. S.S.R.* 42, 458-63 (1956). —  
b Rats after 4 generations under reduced O supply (10.5% O<sub>2</sub>) show signs of gradual change of brain metabolism. The changes are difficult to detect owing to their small magnitude. For example, adenosinetriphosphate and creatine phosphate breakdown occurs more readily. Anaerobic glycolysis becomes less active and the cytochrome system tends to decline in activity. The general trend is to degradation and weakening of the activity of the organism. G. M. Kosolapoff

b  
M. S.

CHENYKAYEVA, YE. YU. (USSR)

"Biochemical and Histochemical Examination of Certain Enzymes of  
Oxidative Metabolism in Brain Tissue in Acute and Chronic Hypoxia."

Report presented at the 5th International Biochemistry Congress,  
Moscow, 10-16 Aug 1961

KREPS, Ye.M.; MANUKYAN, K.G.; PATRIKEYEVA, M.V.; SMIRNOV, A.A.;  
CHENYKAYEVA, Ye.Yu.; CHIRKOVSKAYA, Ye.V.

Phospholipids of subcellular brain particles in chick embryogeny.  
Zhur. evol. biokhim. i fiziol. 1 no.1:16-25 Ja-F '65.

(MIRA 18:6)

1. Institut evolyutsionnoy fiziology i biokhimii im. I.M. Sechenova  
AN SSSR, Leningrad. 2. Glavnyy redaktor "Zhurnala evolyutsionnoy  
biokhimii i fiziology" (for Kreps).

L 62782-65

ACCESSION NR: AP5020628

UR/0218/64/029/006/1111/1118

14

B

AUTHOR: Kreps, Ye. M.; Manukyan, K. G.; Patrikeyeva, M. V.; Smirnov, A. A.; Chenykayeva, Ye. Yu.; Chirkovskaya, Ye. V.

TITLE: Phospholipids of the subcellular particles of hen's brain

SOURCE: Biokhimiya, v. 29, no. 6, 1964, 1111-1118

TOPIC TAGS: cell physiology, brain, cytology, experiment animal

Abstract: Investigations were conducted to determine the content of phospholipids in the subcellular particles (mitochondria, microsomes, and nuclei) of a hen's brain. Grown hens of the White Leghorn variety were used in the investigations. A hen's brain separated from the membrane and the blood vessels was reduced to fine particles and homogenized with a solution of saccharose and ethylenediamine tetraacetate for two minutes. The subcellular particles were isolated by differential centrifuging at temperatures of + 2 to four degrees. The phospholipid content in the subcellular particles was determined by paper chromatography. The investigations established that the phospholipid content was largest in the microsomes, and somewhat lower in the mitochondria and nuclei -- by 10-15 percent. Some differences characterized the fractions: lecithin was

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ACCESSION NR: AP5020628

found to be the largest component in all of the fractions; the fraction content of phosphatidylethanol and phosphatidylserine was somewhat smaller; small concentrations of sphingomyelin, phosphatidylinositol, and phosphatidylglycerol were found. An absence of phosphatidylglycerol is characteristic of the microsomes, although it is always present in the mitochondria and nuclei. It was established also that the microsomes contain larger quantities of sphingomyelin and lecithin than the other fractions, while the mitochondria contain larger quantities of ethanoaminophosphate and serinophosphate. Orig. art. has 1 figure and 2 tables.

ASSOCIATION: Institut evolyutsionnoy fiziologii i biokhimii im. I. M. Sechenova Akademii nauk SSSR, Leningrad (Institute of Evolutionary Physiology and Biochemistry, Academy of Sciences SSSR)

SUBMITTED: 23 Apr 64

ENCL: 00

SUB CODE: LS

NO REF Sov: 005

OTHER: 020

JPRS

Card 2/2

L 32921-66 EWT(1) SCTB DD

ACC NR: AP6018131

SOURCE CODE: UR/0239/66/052/006/0741/0744

AUTHOR: Chenykayeva, Ye. Yu.; Degtyareva, G. F.ORG: Institute of Evolutionary Physiology and Biochemistry im. I. M. Sechenov, AN SSSR, Leningrad (Institut evolyutsionnoy fiziologii i biokhimii AN SSSR)TITLE: Tissue adaptation to chronic hypoxia over a series of <sup>25</sup>  
<sup>B</sup> generationsSOURCE: Fiziologicheskiy zhurnal SSSR, v. 52, no. 6, 1966, 741-744

TOPIC TAGS: animal experiment, hypoxia, brain tissue, tissue physiology, enzyme, biochemistry

ABSTRACT: Succinate dehydrogenase and cytochrome-c-oxidase enzyme activity of the brain was investigated in hypoxia-acclimatized rats of the 13th to 17th generations and compared with results of earlier studies (1st to 12th generations) to determine whether acclimatization gradually produces changes in tissue biochemical processes. Cytochrome-c-oxidase levels (micromols of cytochrome-c oxidized in 1 hr per mg of tissue) of the cerebral hemispheres and the medulla oblongata of experimental and control animals were measured by Pope's method using an SF-4

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UDC: 612.015.3

L 32921-66

ACC NR: AP6018131

spectrophotometer, and the succinate dehydrogenase level of these tissues was measured by Wattenburg and Leong's method (not described). Findings show that contrary to earlier results for the 1st to 12th generations, a statistically reliable increase in cytochrome-c-oxidase activity is found in the medulla oblongata, but the slight increase found in the cerebral hemispheres is not statistically reliable. Succinate dehydrogenase activity of experimental animals does not differ from the levels of control animals or the 1st to 12th generations. The authors conclude that in the prolonged process of hypoxia acclimatization over a series of generations, the tissue biochemical systems undergo changes, particularly of the electron transfer system in the oxidation process. Possibly succinate dehydrogenase activity of the brain will also reflect a change in later generations. Orig. art. has: 2 tables. [06]

SUB CODE: 06/ SUBM DATE: 21Dec64/ ORIG REF: 006/ OTH REF: 004/  
ATD PRESS: 5027

Card 2/2 *LLB*

CHENYSHEV, V., kand.veterin.nauk; VASIL'KOV, G., kand.veterin.nauk

In the Scientific and Technical Council of the Ministry of  
Agriculture of the U.S.S.R. Veterinaria 36 no.6:91-94 Je  
'59. (MIRA 12:10)

(Veterinary medicine)

CHENYSHEVA, L.I.

Pathomorphological changes in the uterine wall in weak labor  
activity. Sbor. nauch. trud. Kaf. akush. i gin. 1 IMI no. 2:  
Sbor. nauch. trud. Kaf. akush. i gin. 1 IMI no. 2: 115-122' 61.

(MIRA 16:7)

(UTERUS, PREGNANT) (LABOR, COMPLICATED.)

CHENZBRAUN, Eugenia

On the active reproduction of some complex movements by birds.  
Studii cerc biol anim 13 no.1:49-55 '61. (EEAI 10:7)

1. Catedra de fisiologia animale lor si a omului, Facultatea  
de stiinaturale, Universitatea C.I. Parhon, Bucuresti.  
(BIRDS) (REFLEXES)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3

CHENZBRAUN, Eugenia; APOSTOL, Gh.

Observations on a hypnosis phenomenon in the Emys orbicularis.  
Communicare AR 13 no.3:289-295 Mr '63.

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3"

CHENZBRAUN, E.

On the elaboration of certain complex forms of behavior  
in birds. Comunicari zoolog 2: 75-80 '63.

CHENZBRAUN, I.

Diagram of homopolar directional protection of a coupling between bus bars.  
p. 125.

ENERGETICA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din  
Romania si Ministerul Energiei Electrice si Industriei Electrotehnice)  
Bucuresti, Romania, Vol. 7, no. 3, Mar. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959.

Uncl.

CHENZBRAUN, Iosub, ing. (Bucuresti)

Distance protection operation with the RD-7 type relay on overloads and possibilities of improving this. Energetica Rum 10 no. 12:517-527 D '62.

1. Seful serviciului de protectie prin releu din unitatea productiva de dipecer energetic din M.M.E.-D.E.E.

PENESCU, Cornel; CALIN, Sergiu; CHENZHRAUN, Iosub

Study on the possibility of utilizing the RD-11 relay in  
electric networks of Rumania. Bul Inst Politeh 26 no.1:  
115-140 Ja-F '64.

1. Chair of Automation, Polytechnic Institute, Bucharest.

PANKEVICH, Arkadiy Petrovich; CHEDOVAYEV, N.S., red.; POMERANTSEV, P.V.,  
red.; SUSHKIN, I.N., red.izd-va; MIKHAYLOVA, V.V., tekhn.red.

[Instruction manual for a course in drawing] Metodicheskoe  
rukovodstvo po kursu cherneniia. Moskva, Gos. nauchno-tekh.  
izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1958. 69 p.,  
220 l. (in portfolio) (MIRA 12:2)

(Drawing)

S/250/62/006/002/006/007  
I003/I203

AUTHOR: Dovnar, S. A., Medvedev, V. S. and Chepa, P. A.

TITLE: Intensified blast cleaning of metals by an abrasive suspension

PERIODICAL: Doklady Akademii Nauk Belaruskay SSR, v. 6, no. 2, 1962, 100-102

TEXT: A new method of blast cleaning is presented in which both the objects to be cleaned and the nozzle of the cleaning apparatus are immersed in a suspension of the abrasive. The advantage of this method is that several nozzles may be used simultaneously; this improves the efficiency of the process and eliminates the necessity of agitating the suspension. Data derived from investigations carried out at different working conditions and recommendations for the best use of this method are given. There are 2 tables and 1 figure.

ASSOCIATION: Institut machinovedeniya i automatizatsii AN BSSR (Institute for Mechanisation and Automatisation of the AS BSSR)

SUBMITTED: April 17, 1961

Card 1/1

DOVNAR, S.A.; CHEPA, P.A.

New method for solving the problem of durability and strength of dies for the deformation of metals and alloys in a hot state.  
Dokl. AN BSSR 7 no.6:384-386 Je '63. (MIRA 16:10)

1. Institut mashinovedeniya AN BSSR i Fiziko-tehnicheskiy institut AN BSSR. Predstavлено akademikom AN BSSR V.P. Severdenko.

L 9984-63EWP(k)/EWP(q)/EMT(m)/BDS--AFFTC/ASD--Pf-4--HW/JD  
ACCESSION NR: AP3003178

S/0250/63/007/006/0384/0386

62  
60

AUTHOR: Dovnar, S. A.; Chepa, P. A.

TITLE: New direction in the solution of the problem of life and dependability of dies for hot forming of metals and alloys

SOURCE: AN BSSR. Doklady, v. 7, no. 6, 1963, 384-386

TOPIC TAGS: forging dies, shot and liquid blasting, forging crank presses, die life

ABSTRACT: Results of industrial testing of a highly efficient method for increasing wear resistance of forging dies are discussed. In this method the die impression of a completely finished, heat-treated, ground, and polished die is strain-hardened by means of shot blasting and then smoothed by liquid blasting. Dies from 3Kh2V8 steel for forging automobile planetary gears on crank presses had 4.4 times the life of abrasive-finished dies for forging the same gears. Comparison with dies finished with either liquid blasting, shot blasting, or chromizing led to the conclusion that none of these other methods can compete

Card 1/2

L 9984-63  
ACCESSION NR: AP3003178

with shot blasting followed by liquid blasting. The method is particularly recommended for dies used on crank presses. The article was presented by Academician V. P. Severdenko, AN BSSR. Orig. art. has: 2 figures and 2 tables.

2

ASSOCIATION: Institut mashinovedeniya AN BSSR (Institute of Machine Science AN BSSR); Fiziko-tekhnicheskiy institut AN BSSR (Physicotechnical Institute AN BSSR)

SUBMITTED: 20Dec62 DATE ACQ: 24Jul63 ENCL: 00

SUB CODE: 00 NO REF Sov: 002 OTHER: 001

phbs

Card 2/2

DOVVAR, S.A.; CHEPA, P.A.

Formation and mechanism of the action of a hydro-abrasive jet on  
metals. Dokl. AN BSSR 8 no.7:468-470 '64. (MIRA 17:10)

1. Fiziko-tekhnicheskiy institut AN BSSR. Predstavлено академиком  
АН БССР К.В. Gorevym.

L 24476-65 EWT(m)/EWP(w)/EPF(c)/EWA(d)/T/EWP(t)/EWP(b)

ACCESSION NR: AF-50001201

Pr-4 JD/DJ

3/0250/64/008/010/0671/0674

26

23

B

AUTHOR: Dovnar, S.A.; Chepa, P.A.

TITLE: Friction and wear during hot deformation of metals by chrome plated tools

SOURCE: AN BSSR, Doklady, v. 8, no. 10, 1964, 671-674

TOPIC TAGS: external friction, punching friction, chrome plating, hot deformation, technological lubrication, tool friction, tool wear

**ABSTRACT:** The effectiveness of chrome plating of the working surfaces of tools used for hot working has been investigated under both experimental and industrial conditions. Tests were carried out on 100x180x220 mm punchers designed for the drop forging of the Cardan shaft cross-piece. The study covered the comparative strength of the ordinary and chrome plated pinchers, the initial and final shapes of the deformed samples, the values of the friction coefficient as a function of the operating temperature and the quality of the surface finish, and the effectiveness of technological lubrication as a function of the microrelief of the deforming tool. The results show that chrome plating does not alter the magnitude of the external friction, but is nevertheless desirable since it prevents changes in micro-relief during the working life of the tool. This in turn maintains a low level of external

Card 1/2

L 24476-65

ACCESSION NR: AP5001201

3

friction. "The studies of friction were carried out jointly with Engineers V.A. Butkevich and G.Ya. Farmon." Orig. art. has: 2 figures, 3 formulas and 4 tables.

ASSOCIATION: Fiziko-tehnicheskiy institut AN BSSR (Physics and engineering institute, AN BSSR)

SUBMITTED: 09Dec63

ENCL: 00

SUB CODE: MM

NO REF Sov: 000

OTHER: 000

Card 2/2

L 02985-67 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6033217

SOURCE CODE: UR/0142/66/009/004/0497/0502

AUTHOR: Yermolayev, Yu. P.; Alimova, R. A.; Chepakhin, G. A.

ORG: none

b1

B

14

TITLE: The influence of certain manufacturing factors on the accuracy of thin-film resistors and capacitors on a common substrate

SOURCE: IUZ. Radiotekhnika, v. 9, no. 4, 1966, 497-502

TOPIC TACS: thin film circuit, microelectronic thin film, circuit design, resistor,  
capacitor

ABSTRACT: The manufacture of precision thin-film resistors and capacitors on the same substrate by the vacuum evaporation method is analyzed. It is shown that with increasing distance from the center of the evaporant the specific resistance of films increases and that of capacitors decreases. The authors give a quantitative analysis of these phenomena based on a geometric interpretation, assuming a finite shadow mask thickness, absence of contaminating gas molecules, and perfect positioning of the mask on the substrate. The curves of specific resistance and capacitance variations as functions of the ratio of mask aperture to mask thickness are given. Equations approximating these curves at various distances from the center of the evaporant are presented. Methods are suggested for optimum geometrical distribution of elements in the thin-film circuit design to obtain maximum accuracy for the passive elements.

Orig. art. has: 5 formulas and 5 figures.

SUB CODE: 09/ SUBM DATE: 22Feb63/ ORIG REF: 003/ ATD PRESS: 5099  
Card 1/1 UDC: 621.382.8.416

CHEPALOV, K.P.

Manifestations of inhibition in heteroallergy  
(Shwartzman phenomenon). Zh. mikrobiol., Moscow No.1  
35-38 Jan 1954. (CIML 25:5)

1. Of the Department of Pathological Anatomy (Head --  
Prof. B.P. Uglyanov), Ryazan' Medical Institute imeni  
Academician I.P. Pavlov.

CHEPALOV, K. P.

CHEPALOV, K. P.: "Morphological research on the effects of the nervous system on inflammatory processes in the skin (the Schwartzmann phenomenon)". Ryazan', 1955. Ryazan' State Medical Inst imeni Academician I. P. Pavlov. (Dissertation For the Degree of Candidate of Science of Medical Sciences)

SO: Knizhnaya Letopis'. No. 41, 8 Oct 55

KECHKER, V. I., CHEPALOV, K. P.

"The Effect of  $\phi$  Cortisone On Anaphylactic Shock in Guinea Pigs of Different Ages."

Theses of the Proceedings of the Annual Scientific Sessions 23-26 March 1959  
(All-Union Institute of Experimental Endocrinology)

From the Chair of Pathological Physiology (Head--Professor L.N. Karlik) of the Ryazan Medical Institute (Director--Professor L. S. Sutulov) and of the Ryazanskaya Oblast Skin and Venereal Disease Dispensary (Chief Physician, V. I. Kechker).

KECHKER, V.I.; CHEPALOV, K.P.

Effect of cortisone on anaphylactic shock in guinea pigs of various  
ages. Probl. endok. i gorm. 6 no. 2:52-54 Mr-Ap '60. (MIRA 14:1)  
(CORTISONE) (ANAPHYLAXIS)

CHEPALOV, K.P. [deceased]; MESHCHERYAKOV, V.I. (Ryazan')

Histiocytic reaction in the area of palatine tonsils, regional lymph nodes, and in regional cellular tissue in the course of rheumatic fever. Nauch. trudy Riaz. med. inst. 14:99-108 '63.  
(MIRA 17:5)

CHEPAK, L.S., tekhnik (stantsiya Nizhnedneprovsk-Uzel, Stalinskoy dorogi)

Probe for inspecting insulated rail joints. Put' i put.khoz. 5 no.2:34  
F '61. (MIRA 14:3)

(Electric railroads—Rails)

CHEPALYGA, A.L.

Recent data on the age of the "Tiraspol' gravel." Dokl.AN SSSR 138  
no.6:1431-1433 Je '61. (MIRA 14:6)

I. Odesskiy gosudarstvennyy universitet im. I.I.Mechnikova.  
Predstavleno akademikom N.M.Strakhovym.  
(Tiraspol' region—Geology, Stratigraphic)

CHEPALYGA, A.L.

Faunal succession in the terrace alluvium of the Dniester River and  
its paleogeographical significance. Dokl. AN SSSR 140 no.2:437-438  
S '61. (MIRA 14:9)

1. Odesskiy gosudarstvennyy universitet im. I.I. Mechnikova.  
Predstavleno akademikom N.M.Strakhovym.  
(Dniester Valley--Paleontology, Stratigraphic)

CHEPALYGA, A.L.

Materials on the Quaternary stratigraphy of the Dniester terraces.  
Trudy Od. un. 152 Ser. geol. i geog. nauk no.8:66-82 '62.

Materials on the stratigraphy of the Eopleistocene terraces of the  
Dniester River. Ibid.:83-97

(MIRA 17:9)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3

CHEPALYGA, A.L.

Quaternary terraces of the lower Dniester Valley. Biul.Kom.  
chety.per. no.27:61-71 '62. (MIRA 16:4)  
(Dniester Valley--Terraces (Geology))

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3"

CHEPALYGA, A.L.

Geology and age of the first and second terrace above the  
flood plain of the lower Dniester Valley. Izv.vys. ucheb.  
zav.; geol. i razv. 6 no.12:128-133 D '63 (MIRA 18:2)

1. Odesskiy gosudarstvennyy universitet im. I.I.Mechnikova.

CHEPALYGA, A.L.

Fossil Margaritifera of Moldavia and the southwestern Ukraine.  
Paleont. zhur. no.3:35-46 '64. (MIRA 18:2)

1. Geologicheskiy institut AN SSSR.

CHEPALYGA, A.L.

Basic stages in the development of fresh-water Quaternary malaco-fauna in the Russian Platform and adjacent areas. Biul. MOIP. Otd. geol. 39 no.5:144 S-0 '64. (MIRA 18:2)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3

NEGDAYEV-NIKONOV, K.N.; ARAPOV, A.S.; CHEBDYLO, A.I.

Quaternary terraces of the Rast basin, Izv. Nauk SSSR  
no. 7-12-21 '64.  
(M.M. Lebedev)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3"

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3

GORHIK, P.P.; CHEPALYGA, A.L.

Synchronization of the Dniester and Prut Terraces. Inv.  
AN Mold.SSR no. 7122-25 '64.

(KIRA 15a12)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3"

CHEPARENKO, I. I.

Origin of folded structure formation in the Lisichansk region  
of the northwestern part of the Donets ridge [with summary in  
English]. Dop. AN URSR. no. 4:387-390 '57. (MIRA 11:3)

1. Institut geologicheskikh nauk AN URSR. Predstavлено akademikom  
AN URSR V.G. Bondarchukom [V.G. Bondarchukom]  
(Lisichansk region--Geology, Structural)

SHVETS, I.T., akademik; DYBAN, Ye.P., kand.tekhn.nauk; STRADOMSKIY, M.V.,  
kand.tekhn.nauk; GUSAK, Ya.M., inzh.; ZATKOVETSKIY, G.N.;  
KLIMENKO, V.N.; NASYBULLINA, A.A.; CHEPASKINA, S.M.

Development and study of the air cooling system of the rotor  
of the GT-6-750 high-pressure turbine. Energomashinostroenie  
11 no.10:22-25 0 '65. (MIRA 18:11)

1. AN UkrSSR (for Shvets).

YAROSLAVSKIY, V., brigadir ~~mostostroyeniya~~ (Lobnya Moskovskoy obl.); SIPRIKOV, V. (pos.Zavolzh'ye Gor'kovskoy obl.); FAL'BAUM, G. (Odessa); STAREN'KIY, S. (Saratov, Vol'skaya, 91, kv.7); DUDNIKOV, A. (Krasnodar); UGLEV, P. (Perm'); MEDOVAYA, A., inzh. (Leningrad); TRIGUBOVICH, A., frezerovshchik (Dzerzhinsk, Minskoy obl.); FINOV, G., student (Tula); YAKOVLEV, A., slesar' (Moskva); MALININA, N. (Tallin); CHEPAYKIN, G., inzh. (Moskva)

Advertising board. Izobr.i rats. no.5 (201) 38-39 '63.  
(MIRA 16:7)  
(Technological innovations)

CHEPAYKIN, G.A., inzh.

Principles of the design of hydraulic turbine test stands and selection  
of their bearings. Trudy MEI no.46:159-170 '63.

(MIRA 18:3)

1. Vsesoyuznyy ordena Lenina proyektno-izyskatel'skiy i nauchno-  
issledovatel'skiy institut imeni S.Ya.Zhuka.

DOLGOV, B.N.; GOLODNIKOV, G.V.; CHEPARUHINA, L.M.

Degradation of benzoic acid esters over a chromium catalyst.  
Zhur. ob. khim. 25 no. 8:1555-1560 Ag '55. (MIRA 9:2)

1. Leningradskiy gosudarstvenny universitet.  
(Benzoic acid)

CHERNUKHINA, O.

7

✓ Decomposition of esters of benzoic acid over chromium catalyst. B. N. Dalgov, G. V. Golodnikov, and L. M. Chicherukhina (State Univ., Leningrad). Zhur. ~~Obrabotka~~ Khim. 19, 1855-60 (1955). — Passage of  $\text{BzOEt}$ ,  $\text{BzOBu}$  and  $\text{BzOAm-iso}$  over  $\text{Zn-Cr}$  catalyst (cf. C.A. 49, 10170c) at 330–420° yields  $\text{C}_6\text{H}_6$ ,  $\text{CO}_2$ , and olefin, in one reaction sequence, and an alkyl aryl ketone in another sequence. For prepn. of the ketones the best conditions are 400–20° at space velocity 50–60; under these conditions the yields of ketones are: AcPh 9.3%,  $\text{PrCOPh}$  6.0%, iso-BuCOPh 2.3%. — G. M. Kosolapoff

L 21650-66 EWT(d)/EWT(m)/EWP(w)/EWP(f)/EPP(n)-2/EWP(v)/T-2/EWP(k)/ETC(m)-6 WW/RM  
ACC NR: AP6006138 SOURCE CODE: UR/0114/65/00/010/0022/0025

AUTHORS: Shvets, I. T. (Academician AN UkrSSR); Dyban, Ye. P. (Candidate of technical sciences); Stradomskiy, M. V. (Candidate of technical sciences); Gusak, Ya. M. (Engineer); Zatkovetskiy, O. N.; Klimenko, V. N.; Nasibullina, A. A.; Chepaskina, S. M.

ORG: none

TITLE: Development and investigation of the air cooling system for the high-pressure turbine rotor of GT-6-750 TMZ

SOURCE: Energomashinostroyeniye, no. 10, 1965, 22-25

TOPIC TAGS: turbine, turbine cooling, gas turbine, blade cooling/ GT-6-750 gas turbine

ABSTRACT: In conjunction with the development of gas turbine GT-6-750 (initial gas temperature 750°C, pressure 5.8 kg/cm<sup>2</sup>), several air cooling systems for the high-pressure turbine rotor were designed and tested at the Ural Turbine Factory and Institute of Heat Physics of the AN UkrSSR (Ural'skiy turbomotornyy zavod i Institute tekhnicheskoy teplafisiki AN UkrSSR). The development of the final

Cord 1/4

UDC: 621.438:62-71.001.5

L 21650-66

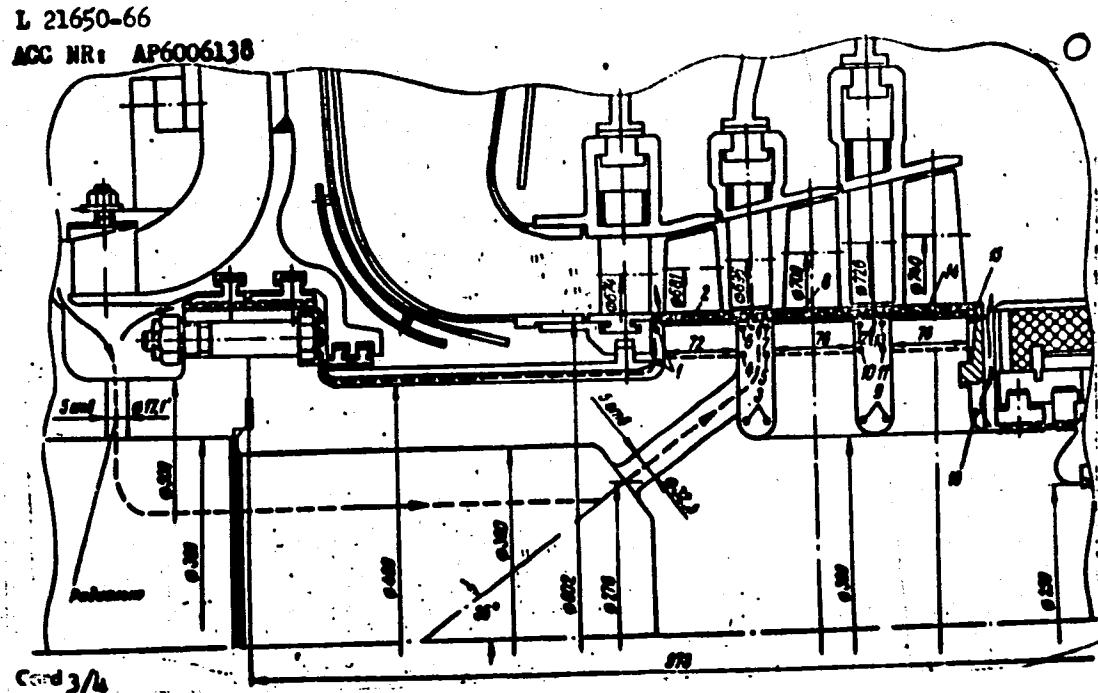
ACC NR: AP6006138

cooling system shown in Fig. 1 is discussed and the temperature distributions at the blade roots and in the turbine wheel are graphically presented for cooling air flows of 0.9 and 0.73 kg/sec respectively (0.73 kg/sec represents 1.7% of the total gas flow). The values of local cooling air pressure, temperature, flow rate, and heat transfer coefficient at the 16 locations in Fig. 1 are tabulated. It was found that the cooling system maintained all metal temperatures below 410°C (at 0.73 kg/sec) and calculations show that the cooling flow can be further reduced to 0.4--0.45 kg/sec without dangerous temperatures. With such a cooling system, perlitic steels can be used with gas temperatures of up to 900°C. The experiments confirmed the accuracy of previously proposed methods for calculating the cooling system parameters (Ie. P. Byban, Issledovaniye sistemy vodoshchnogo okhleshdniya roterov gasovykh turbin. Avtoreferat dissertatsii. LPI im. M. I. Kalinina, 1964).

Card 2/4

"APPROVED FOR RELEASE: 06/12/2000

**CIA-RDP86-00513R000308320020-3**



APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320020-3"

L 21650-66

ACC NR: AP6006138

Fig. 1. Cooling system for  
OT-6-750 gas turbine rotor.

Orig. art. has: 1 table and 4 figures.

SUB CODE: 21, 13/ SUBJ DATE: none/ ORIG REF: 003

Cont'd b/b

CHEPAYEV, I.P., veterinarnyy vrach; ZIN'KOVA, Z.V., veterinarnyy vrach;  
GORDIYENKO, L.F., veterinarnyy vrach.

Myarsenel in treating listerellosis in swine. Veterinariia 32  
no. 9:41-43 S '55. (MIRA 8:12)

1. Przheval'skaya meshrayennaya veterinarnaya laboratoriya i  
rayennaya veterinarnaya lechebnitsa Kirgizskoy SSR.  
(ARSPHENAMINE) (SWINE--DISEASES) (LISTERELLOSIS)

USSR/Diseases in Farm Animals. Noncontagious Diseases.

Abs Jour: Ref Zhur-Biol., No 12, 1956, 54912.

Author : Chepnyev, I<sup>P</sup>; Zin'kova, Z.

Inst :

Title : Alimentary (Forrage) Hepatitis in Sheep.

Orig Pub: S. kh. Kirgizii, 1957, No 5, 52.

Abstract: It was observed that on soils which lack albumins sheep become sick at the end of their pregnancies. After clinical symptoms appear (refusal of food, general depression), the disease lasts for 3-4 days. Medical treatment is of little effect, for it is applied when the liver has already degenerated. It is recommended that the sheep receive additional forage which is rich in albumins and vitamins during the second half of their pregnancy.

Card : 1/1

5

8(6)

SOV/112-59-3-4640

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 3, p 51 (USSR)

AUTHOR: Chepaykin, G. A.

TITLE: Determination of Losses at the Inlet of the Stream into the Turbine Case  
(Opredeleniye poter' pri vkhode potoka v turbinnuyu kameru)

PERIODICAL: Izv. vyssh. uchebn. zaved. Energetika, 1958, Nr 2, pp 103-113

ABSTRACT: A universal equation for determining the loss of head was developed from examination of a steady-state stream before the turbine case; cross-sections of hydraulic profiles with undisturbed speed epures before the entrance to the turbine case and before the wicket-gate mechanism were examined. The formula can be used for determining losses in a flow past baffle piers, slits, sills, or other obstructions. The cumbersome form of the equation and the need for hydraulic-flow nets provoked simplifications with experimental corrective factors for various cases of direct entrance. Correction factor curves are presented, as well as recommendations on their approximate

Card 1/2

8(6)

SOV/112-59-3-4640

**Determination of Losses at the Inlet of the Stream into the Turbine Case**

selection for cases deviating from specified conditions; results of an experimental determination of the resistance offered by a 3-dimensional model of the upstream part of an integrated-type hydroelectric station are also presented. A satisfactory agreement between experiments and calculations is noted.

Bibliography: 3 items.

ASSOCIATION: Moskovskiy ordena Lenina energeticheskij institut. I.I.O.

Card 2/2

CHEPAYKIN, G.A., inzh.

Possibility of deviations from commonly used dimensions of  
turbine chambers. Trudy VIGM no.24:190-197 '59.

(MIRA 12:8)

(Hydraulic turbines)

CHEPAYKIN, G.A., inzh.

Heating the trash racks of hydroelectric power stations.  
Gidr.stroi. 32 no.9:42-43 S '62. (MIRA 16:2)  
\* (Hydroelectric power stations—Cold weather conditions)

VAGANOV, P.V., dotsent; IKONNIKOV, A.N., dotsent; KOMPANEYETS, V.P.,  
dotsent; KABAKOV, Yu.A., starshiy prepodavatel'; CHEPCHUGOV,  
P.M., inzh.

Investigation of ore chuting in loading with excavators. Izv.  
vys.ucheb.zav.; gor.zhur. no.4:42-47 '60. (MIRA 14:4)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva. Rekomendova-  
vana kafedroy rudnykh i rossyynykh mestorozhdeniy.

(Mine haulage)

VAGANOV, P.V.; IKONNIKOV, A.N.; KOMPANEYETS, V.P.; KABAKOV, Yu.A.;  
CHEPCHUGOV, P.M.

Use of underground excavators in steeply pitching ore deposits.  
Trudy Gor.-geol.inst.UFAN SSSR no.54,137-147 '60. (MIRA 14:6)  
(Mining engineering) (Excavating machinery)

CHEPCHUROV, Ya.I.; GANIN, Yu.V., inzh.; LATYSHEV, I.Ye.

Device for determining the acid numbers of the products of  
paraffin oxidation. Masl.-zhir. prom. 29 no.10:37 O '63.  
(MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut  
sinteticheskikh zhirozameniteley.

RABINOVICH, M.I.; BULGAKOV, K.B.; NEZDATNYY, S.M.; CHEPEL', G.T.

Gas stove with outlet of combustion products into a flue. Gaz.  
prom. 8 no. 326-26 '63  
(MIRA 1737)

CHEPEL', I. K.

PA 20/49T12

USSR/Electricity  
Turbogenerators  
Testing and Standardization

Sep 48

"Testing the Active Iron in Turbogenerator Stators,"  
I. K. Chepel', Engr,  $\frac{1}{2}$  p

"Elek Stants" No 9

Presents results of testing five stators. Test  
should be performed on stators to discover local  
defects after 12-15 years' running.

20/49T12

BREGER, A.Kh.; ORMONT, B.P.; VITING, B.I.; GRIZHKO, V.M.; KOZLOV, V.A.;  
KUTSEV, V.S.; CHAPYZHNIKOV, B.A.; CHEPEL', L.V.

Radioactivation method of determining oxygen in semiconducting  
materials and metals on the basis of the photonuclear reaction  
 $O^{16} (\gamma, n) O^{15}$ . Trudy kom.anal.khim. 10:137-141 '60.

(MIRA 13:8)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova, Moskva.  
(Oxygen--Analysis)  
(Oxygen--Isotopes)  
(Semiconductors--Oxygen content)

S/120/62/000/002/003/047  
E039/E420

AUTHORS: Chepel', L.V., Viting, B.I., Chapyzhnikov, B.A.

TITLE: Exposure inside the accelerating space of a betatron

PERIODICAL: Pribory i tekhnika eksperimenta, no.2, 1962, 23-26

TEXT: For a series of physical and physicochemical investigations it was necessary to significantly increase the specific induced activity of samples exposed in a betatron or synchrotron.

Samples are normally placed outside the accelerator at a distance of not less than 20 to 30 cm from the target. In this paper two new methods are described for exposing solid and liquid samples inside the working space of a betatron giving an increase in the specific induced activity of 20 to 100 times. The first method makes use of an internal pocket with dispersion foils and is a modification of a previously described method. The pocket consists of a glass tube of 30 mm bore with a flat topped platinum cap at one end attached by means of a Kovor collar. At the other end of the tube is a vacuum seal for mounting the pocket in the apparatus. Eddy current heating is insignificant; an equilibrium temperature of 70°C being obtained. The glass tube

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S/120/62/000/002/003/047

E039/E420

Exposure inside the ...

is coated with an earthed layer of "Aquadag". The effect of the dispersion foils on the distribution of the electron beam is examined by means of autoradiographs of exposed single crystals of rock salt. The second method makes use of two glass tubes which terminate in a small volume  $\sim 2$  cc in the working space of the betatron and can be used to expose liquids to the fast electron beam. Both methods can be used for obtaining small quantities of artificial isotopes and also for exposing a series of materials to fast electrons without stopping the betatron. Absolute values of the induced activity for plates of Cu<sup>64</sup> volume  $10 \times 10 \times 0.5$  mm<sup>3</sup> exposed in the pocket are  $\sim 0.5 \mu$  curies with a radiation intensity of 50 rpm at a distance of 1 m from the target. These methods are used for the radioactivation analysis of metals, semiconductors and some hydrocarbons and polymers. There are 8 figures and 1 table.

ASSOCIATION: Fiziko-khimicheskiy institut (Institute of Physics and Chemistry)

SUBMITTED: June 7, 1961

Card 2/2

L 14943-63

EWP(j)/EPF(c)/EWT(m)/BDS - ASD Pr-4 RM/WW

ACCESSION NR: AP3003761

8/0075/63/018/007/0865/0872

AUTHORS: Chepel', L. V.; Chapyzhnikov, B. A.; Viting, B. I.

65  
60

TITLE: Radioactivation method for determining oxygen in some polymers

SOURCE: Zhurnal analiticheskoy khimii, v. 18, no. 7, 1963; 865-872

TOPIC TAGS: radioactivation method, oxygen, polymer, photomolecular reaction,  
 $O^{15}$ , linear electron accelerator,  $C^{11}$ 

ABSTRACT: This is a continuation of studies which authors previously conducted with respect to developed radioactivation method for determining oxygen which was suitable to be applied to other objects (metals and semiconductors). Authors state that a further augmentation of the methods sensitivity can be attained by using powerful sources of electromagnetic radiation (linear electron accelerators) and by perfecting the measurement of the activity of  $O^{15}$  on the "background" of other isotopes which are formed in the analyzed material by photonuclear reactions. Present work is devoted to an examination of a special method for measuring the activity of the  $O^{15}$  isotope on the "background" of the  $C^{11}$  isotope. The photonuclear reaction  $O^{16}(Gamma, n)O^{15}$ , whose threshold is 15.6 Mev, forms the positron-active isotope  $O^{15}$  with a half-life period of 127 seconds and positron

Card 1/2

L 11943-63

ACCESSION NR: AP3003761

energy of 1.68 Mev. The relationship of the reactions size to the Gamma-quanta energy is shown in a figure. This figure also contains the curve for the dependence of the size on the energy for the reaction  $\text{Cl}^{12}(\text{Gamma}, \nu)\text{Cl}^{11}$  which forms the positron-active  $\text{Cl}^{11}$  isotope. Authors then discuss significance of the curves, which were obtained with radiation of various energy. The Gamma-radiation source was the betatron from the Physico-Chemical Institute. The analyzed samples were irradiated inside of the betatron's acceleration chamber. The analysis method was worked out on samples of artificial and natural rubber. The activity of the sample was measured with a device consisting of a scintillation counter and recorder. The scintillation counter included a photoelectron multiplier and plastic scintillator. The samples were irradiated for 2 minutes, and after 30 seconds elapsed after termination of irradiation, the measurements of activity began. Data obtained was plotted onto a decay curve. A formula is given for computing the oxygen content. "Authors wish to thank A. S. Kuz'minskiy, A. Kh. Breger and V. F. Chertkova for a number of valuable hints during development of the method and for discussing the results." Orig. art. has: 5 figures, 1 table and 1 formula.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova, Moscow  
(Physico-Chemical Institute)

SUBMITTED: 08Sep62 DATE ACQ:08Aug63 ENCL: 00  
SUB CODE: CH, EL NO REF SOV: 008 OTHER: 008  
Card 2/2

L 24808-65 ENG(j)/EVT(m)/EPF(c)/EPR/EWP(j)/EWA(h)/EWA(l)  $Pc-41/Pr-41/Ps-41/Pa-41/Peb$   
SSD/AFWL/ASD(m)-3/DIAAP/RPL RM/WW  
ACCESSION NR: AP4046382 S/0020/64/158/003/0682/0684 42  
40  
13

AUTHOR: Chepel', L. V.; Shemarov, F. V.

TITLE: Determination of fluorine and chlorine in polymers by the gamma-activation method

SOURCE: AN SSSR. Doklady\*, v. 158, no. 3, 1964, 682-684

TOPIC TAGS: quantitative analysis, fluorine, chlorine, polymer, fluorochloro polymer, photonuclear reaction, radioactive fluorine, radioactive chlorine, radioisotope determination

ABSTRACT: A method for determining fluorine and chlorine in organic compounds was worked out based on the photonuclear reactions  $F^{19}(\gamma, n)F^{18}$  and  $Cl^{35}(\gamma, n)Cl^{34}$ , 112 and 33 minute half-lives, respectively. The samples (~100 mg) were irradiated in a betatron equipped with a special chamber providing radiation intensity of about 6000 r/min. The activity of the samples was measured on an apparatus for registering  $\gamma$ -quanta formed by the annihilation of the positrons. Activation of the carbon was avoided by irradiation with a maximum energies of 18 Mev for 20 minutes and the changes in activity were determined by 3 measure-

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ACCESSION NR: AP4046382

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ments. An equation was developed for simultaneously calculating fluorine and chlorine in a sample. Experimental results were within 1.5% of the theoretical values for the F and Cl content in polymeric fluoro-, chloro- and chlorofluoro-materials. The accuracy in the Cl analyses could be improved by increasing the sample weight. It was suggested an analogous method would be applicable to the simultaneous determination of C and F, of C and Cl, and other pairs of elements. "The authors express sincere acknowledgement to academician V. A. Kargin for discussing the arrangement of the given work." Orig. art. has: 1 table and 3 equations.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-chemical Institute)

SUBMITTED: 23Apr64

ENCL: 00

SUB CODE: NP, GC

NO REF SOV: 004

OTHER: 002

Card 2/2

L 46173-66 EVT(m)/EVP(j)/T IJP(c) DJ/RM

ACC. NR: AP6021206

(A)

SOURCE CODE: UR/0138/66/000/003/0049/0053

AUTHOR: Chernal', L. V.; Chapyzhnikov, B. A.; Mikhaylova, G. N.; Zhuravskaya, Ye. V.; Kuz'minskiy, A. S.

ORG: Physicochemical Institute im. L. Ya. Karpov (Fiziko-khimicheskiy institut);  
Scientific Research Institute of the Rubber Industry (Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti)

TITLE: Radioactive method of determining oxygen in elastomers during their processing  
and aging

SOURCE: Kauchuk i rezina, no. 3, 1966, 49-53TOPIC TAGS: oxygen, elastomer, radioisotope

ABSTRACT: A method has been developed for determining the oxygen content of polymers directly during their processing and aging, the sample being unaffected by the analysis. It consists in activating the nuclei of oxygen and carbon present in the polymer by means of gamma radiation, then identifying the radioisotopes formed. Since the radioisotopes  $O^{15}$  and  $C^{11}$  are formed simultaneously during the irradiation, in order to measure the activity of  $O^{15}$  against the background of  $C^{11}$ , a technique of discrimination involving the use of a laboratory scintillation analyzer was employed. The method was first applied to the study of the oxidation kinetics of raw and cured rubbers during rolling, vulcanization, and radiation aging, and then to the determination

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UDC: 678.4/.7:543:844:621.039.83

L 46173-66

ACC NR: AP6021206

of oxygen in an unfilled NK-base rubber at various stages of vulcanization in the  
press. The method can also be used to study the development of oxidation processes  
associated with wear and fatigue in rubbers. Orig. art. has: 4 figures and 1 table.

3

SUB CODE: 11/ SUMM DATE: 25May64/ ORIG REF: 003/ OTH REF: 002

Card 2/2 mt

VASIL'YEV, N.D.; CHEPEL', O.G.

Technological process of casting a steel plunger of 21,000 kg gross weight.  
Lit.proizv. no.9:12-13 and 20 S-0 '53.

(MLRA 6:9)

(Steel castings)

~~CHEPIL'~~, V.M.; VITKIN, V.M.; LEBEDEV, M.V., redaktor; AKATOVA, V.G.,  
~~redaktor~~; GEROVA, O.A., tekhnicheskiy redaktor.

[A stoker's manual] V pomoshch' kochegaru. Moskva, Izd-vo  
Ministerstva komunal'nogo khoziaistva RSFSR, 1954. 174 p.  
(Steam boilers) (Combustion) (MLRA 7:12)

CHMPL', Vladimir Mikhaylovich; LAPIN'YE, I.R., red.; DAYEV, G.A., vedushchiy red.; GEMAD'YVA, I.M., tekhn. red.

[Burning gases in boiler furnaces and ovens and servicing of the gas system in plants] Shiganie gazov v topnakh kotlov i pechei i obslushhivaniye gazovogo khoziaistva predpriatii. Leningrad, Gos. nauchno-tekhn. izd-vo naft. i gorno-toplivnoi lit-ry, Leningr. otd-nie, 1958. 276 p. (MIRA 11:10)  
(Gas as fuel) (Furnaces) (Ovens)